

OBL). Beaver activities have had major effects on the wetland hydrology and the survivorship of planted woody vegetation.

Except for portions of the rice cutgrass community (e.g., Plot A), the majority of WMA A has greater than 90% total plant cover and the dominant plant species are hydrophytes and comprise greater than 50% of the total plant cover (Table 1). No one species comprises greater than 50% of the total area within WMA A, although narrow leaf cattail appears to be the dominant plant species in the wetland. Given these data, WMA A meets the performance standard for cover by hydrophilic vegetation because it has obtained a minimum 85% vegetative coverage, is dominated by hydrophytic species, and no single species comprised greater than 50% of the total cover.

WMA B is located adjacent to the south of Long Run. Most of Wetland B is inundated by surface water and our observations indicate that the mixed marsh plant community is relatively well established. The dominant species in Wetland B included narrow leaf cattail, rice cutgrass, a sedge (*Carex sp.*), bur-reed (*Sparganium eurycarpum*, OBL), and wool-grass (*Scirpus cyperinus*, FACW+). Portions of WMA B exceed 85% plant cover (e.g., Plot H – Table 1; Photograph 17) but other parts of the wetland have less vegetative cover and more open water (Plot I; Photograph 18). While WMA B meets the cover criterion that the plant community is dominated by hydrophytes, it does not have greater than 85% total plant cover and one species, narrow leaf cattail, comprises greater than 50% of the plant cover. Therefore, wetland B does not yet meet the vegetation composition and cover performance standard.

#### 3.3.4 Woody Plant Survival

Trees and shrubs were planted in the wetland mitigation areas and in the surrounding upland buffer habitat area during initial construction. Table 2 reports survival rates for woody stock planted in WMA B and riparian area habitats at the site. Survival of woody plants in WMA was estimated at 79%, which is very good and meets the 50% performance criterion specified in the original mitigation plan.